

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014722**Date Inspected:** 12-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Mr.Huang Min / Mr. Liu Fa wen			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No N/A</b>

**Bridge No:** 34-0006 **Component:** Orthotropic Box Girder( OBG)

**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 5

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint TR6C-PP098-005. Welder is identified as 052696. ZPMC Quality Control (QC) is identified as Mr. Shen jian guo. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4c-F.

BAY-6

Shielded Metal Arc Welding (SMAW) of weld joint WJF-0-192. Welder is identified as 057795. ZPMC Quality Control (QC) is identified as Mr. Zhao Jian Hang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3211-TC-U4c.

BAY-7

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005960.

### Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Traveler Rail weld Component. Total number of welds UT Tested: 50 No's. The weld designations are review as follows:

1. 22TR4-001~004-001,003,005,007,009.
2. 22TR2-002-001,003,005,007,009.
3. 22TR1-001,002-001,003,005,007,009.
4. 22TR3-002~004-001,003,005,007,009.

During the Quality Assurance (QA) Ultrasonic Testing (UT) review of weld located on Traveler Rail (TR)- 22TR2-002, this QA Inspector observed One (1) Class "A" indication measuring approximately 12 mm in length. The Indication rating is +9dB. The depth of the indication is 16.70 mm. The weld joint is identified as 22TR2-002-001.

The weld is a Complete Joint Penetration (CJP) with reinforcement fillet weld joining TR web to flange. The thickness of the web is 20 mm.

This QA Inspector generated an incident report on this date, for further information see the incident report.

FCAW of weld joint BP3062-001-015/016. Welder is identified as 205386. ZPMC Quality Control (QC) is identified as Mr. Xia Yong Zheng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

SMAW Tack welding on Bottom panel weld joint BP3044-001-016. Welder is identified as 250833. ZPMC Quality Control (QC) is identified as Mr. Xia Yong Zheng. The welding variables appeared to comply with the Applicable WPS: WPS-B-P-2112.

Refer attached photo for reference.

SMAW Tack welding on Bottom panel weld joint BP3045-001-027. Welder is identified as 203204. ZPMC Quality Control (QC) is identified as Mr. Xia Yong Zheng. The welding variables appeared to comply with the Applicable WPS: WPS-B-P-2112.

Refer attached photo for reference.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

---